

RECEIVED  
CENTRAL FAX CENTER  
JAN 05 2007

**B. Amendments to the Specification:**

Please replace the paragraphs at page 6, lines 18 to page 7, lines 1-15 with the following amended paragraphs:

Referring now primarily to FIG. 1, the basic elements in a typical WLAN communication system will hereinafter be described. A baseband signal generator 102 generates a signal that needs to be transmitted. The transmitter modem, which is a part of baseband signal generator 102, generates samples of the signal and passes it through a Digital to Analog Converter (DAC) 104. DAC 104 has a sampling rate  $f_{st}$  with an unknown error  $[\delta f_{st}]$   $\underline{df}_{st}$ . The signal is then passed through a Low Pass Filter (LPF) 106 to meet the required spectral mask. Thereafter, the signal is passed onto a multiplier 108 that is responsible for up-converting the baseband signal to carrier frequency  $f_c$  with an unknown error  $[\delta f_{ct}]$   $\underline{df}_{ct}$ . The signal at the output of multiplier 108 is then transmitted by a transmitter antenna 110. All the frequencies used at the transmitter are generated by a master oscillator 112. Further, the carrier frequency  $f_c$  is generated by a clock multiplier 114, which also sources the clock from a master oscillator 112.

The transmitted signal is received by a receiving antenna 116 present at a remote receiver. The received signal is first down-converted from the carrier frequency by a multiplier 118 and an LPF 120. Multiplier 118 multiplies the received signal with a sine wave function that results in the conversion of the received signal into a signal containing a baseband component as well as a high frequency narrow band

component. LPF 120 filters out the high frequency component so that only the baseband signal remains. The down-conversion frequency is  $f_c$  with a carrier offset of  $[\delta f_{cr}]$   $\underline{df_{cr}}$ . After this, the signal is sampled and converted to digital form by an Analog to Digital Converter (ADC) 122. ADC 122 has a sampling rate  $f_{sr}$  with an unknown error  $[\delta f_{sr}]$   $\underline{df_{sr}}$ . The resulting signal from ADC 122 is then processed by a baseband signal processor 124 for the purpose of demodulation and decoding. All the frequencies used at the receiver are generated by a master oscillator 126. Further, the carrier frequency  $f_c$  (with the offset  $[\delta f_{cr}]$   $\underline{df_{cr}}$ ) is generated by a clock multiplier 128, which sources the clock from master oscillator 126.